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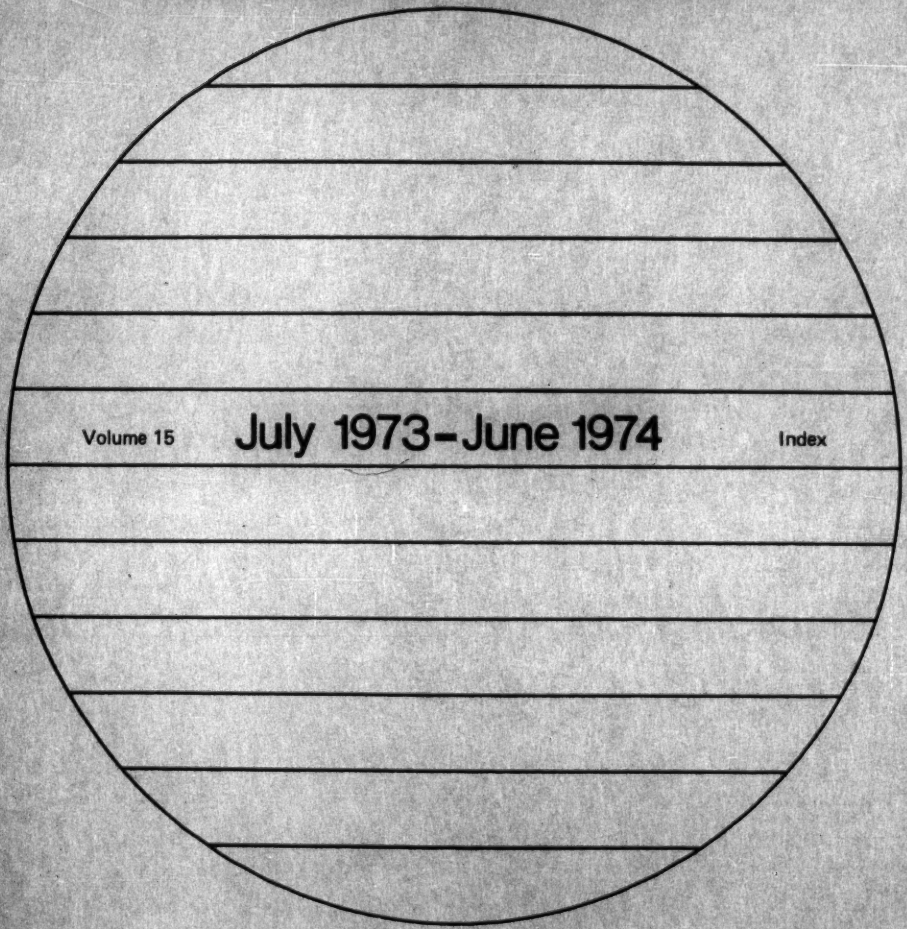

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51.10.J Inelastic–neutron diffraction and scattering

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51.10.L Elastic–electron diffraction and scattering (includes LEED)

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51.10.N Inelastic–electron diffraction and scattering

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51.30.+ Liquid crystals

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51.40.– Amorphous and polymeric materials

Formation of Amorphous Films When Tellurium is Condensed on Au, Ag, and Cu (E)—I. E. Bolotov and A. V. Kozhin. 15(2), 436–7 (Aug. 1973); CPM-7308D0688

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51.50.– Crystalline state (including molecular rotation in solids)

51.50.E Crystal symmetry; models and space groups

Space Symmetry of Polar Antiferroelectric Crystals (T)—A. G. Titov. 15(1), 154–6 (Jul. 1973); CPM-7307E1274

51.50.G Crystalline systems and crystalline classes

Geometry of the hydrogen bond and of the van der Waals interaction at O—H...O contacts in molecular crystals (T)—Yu. V. Zefirov. 15 (11), 2287–8 (May 1974); CPM-7405F1115

51.50.I Crystal binding

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Fuchs equations for lattices (T)—V. A. Zhdanov, A. V. Zhukov, and V. F. Konusov. 15(12), 2463 (Jun. 1974); CPM-7406X1943

51.50.N Specific structures: metals and alloys

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51.50.Q Specific structures: other inorganic materials

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Investigation of the hydrate isomerism of the Cr^{3+} ions in an $AlCl_3{\cdot}6H_2O$ single crystal by the ESR method (E/T)—O. F. Gataulin, M. M. Zaripov, and Yu. M. Ryzhmanov. 15(7), 1513–4 (Jan. 1974); CPM-7401D1253

51.70.– Defects in crystals

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51.70.B Thermodynamic processes (formation, annealing, etc.)

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51.70.D Volume defects

Distribution of Volume Discontinuities in Deformed Aluminum (E)— V. I. Betekhtin, A. I. Petrov, and V. N. Savel'ev. 15(2), 449–50 (Aug. 1973); CPM-7308D0701

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51.70.F Interstitials and vacancies

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51.70.H Color centers

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51.70.K Other point defects

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51.70.M Dislocations

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51.70.P Stacking faults and other planar defects

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51.70.W Impurity concentration, distribution, and gradients

Hysteresis of Magnetization Reversal in Orthoferrite Crystals (E)—V. I. Khrabrov. 15(1), 102–6 (Jul. 1973); CPM-7307E1222

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51.80.– Radiation damage and other irradiation effects

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51.80.K Ions, molecules, and heavy particles

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51.80.M Channeling, blocking, and energy loss of particles

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52. MECHANICAL AND ACOUSTIC PROPERTIES OF CONDENSED MATTER

52.20.– Mechanical properties of solids

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52.20.F Deformation and plasticity, including yield, ductility, and superplasticity

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52.20.H Creep

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52.20.M Brittleness, fracture, and cracks

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52.30.+ Mechanical and elastic waves

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52.40.+ Anelasticity, internal friction, and mechanical resonances

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53. LATTICE DYNAMICS

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53.70.– Thermal and statistical properties of lattices

53.70.C Thermal conduction of lattices

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53.70.J Cooperative crystal statistics and order–disorder phenomena

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54.70.F Liquid—vapor transitions

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54.80.C Solubility, segregation, and mixing

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55.40.– Heat capacities of solids

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55.90.+ Other topics in thermal properties of condensed matter

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56. TRANSPORT PROPERTIES OF CONDENSED MATTER (NONELECTRONIC)

56.10.+ Diffusion and ionic conduction in liquids

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56.20.+ Viscosity of liquids

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56.30.K Impurity and defect diffusion, migration, and displacement

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56.70.+ Thermal conduction in nonmetallic solids

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58.20.D LEED

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61. ELECTRON STATES

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61.30.– Nonlocalized single–particle electronic states

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61.70.D Metals and semimetals

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61.70.F Alloys

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61.80.– Polarons, excitons, and other excitations

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62. ELECTRONIC TRANSPORT IN CONDENSED MATTER

62.10.— Electronic conduction in metals and alloys

62.10.E Electrical and thermal conduction in crystalline metals and alloys

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63. ELECTRONIC STRUCTURE AND ELECTRICAL PROPERTIES OF SURFACES, INTERFACES, AND THIN FILMS

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64. SUPERCONDUCTIVITY

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65. MAGNETIC PROPERTIES AND MATERIALS

65.10.– General theory and models of magnetic ordering

65.10.G Heisenberg and Ising models

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65.20.– Diamagnetism and paramagnetism

65.20.C Nonmetals and metallic compounds

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65.30.C Saturation moments and magnetic susceptibility

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65.30.E Exchange and superexchange interactions

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65.40.D Spin waves

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65.60.– Domain effects, magnetization curves, and hysteresis

65.60.D Fine particles

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65.60.H Domain effects, after effect, and hysteresis

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66.30.H Paramagnetic resonance of platinum and palladium group (4d and 5d) ions and impurities (Zr–Ag and Hf–Au)

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68.20.L Magneto–optical effects and properties

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68.30.– Infrared and Raman spectra and scattering

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68.30.E Infrared and Raman spectra in metals

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68.30.G Infrared and Raman spectra in inorganic crystals

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68.40.– Visible and ultraviolet spectra

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68.40.H Semiconductors

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68.50.G Semiconductors

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68.60.– Luminescence spectra and radiative recombination

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68.60.D Photoluminescence

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68.70.– Other spectra and interactions between radiation and matter

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68.70.C X–ray absorption and absorption edges

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68.70.E X–ray emission threshold and fluorescence

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68.80.+ Optical properties of thin films

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69. ELECTRON AND ION EMISSION BY LIQUIDS AND SOLIDS; IMPACT PHENOMENA

69.20.- Impact phenomena, including electron spectra and sputtering

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69.20.D Laser impact phenomena

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69.20.F Electron impact: Auger emission

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69.20.H Electron impact: secondary emission

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69.20.K Other electron impact phenomena

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69.20.R Atomic and molecular beam interactions

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69.60.– Photoemission

69.60.C Clean metals

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69.70.+ Field emission and field ionization

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69.90.+ Other Topics in emission and impact phenomena in condensed matter

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71. OPTICS

71.50.+ Quantum optics

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71.60.– Lasers

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71.65.– Nonlinear optics

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71.65.D Stimulated Raman, parametric oscillations, and other interactions of radiation with matter

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